

The compound order processes described may be adapted for a wide variety of trades and financial instrument types and the invention is not limited to the specific examples that have been described.

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What is claimed is:

1. An anonymous trading system for trading fungible instruments between traders; comprising:

10 a communications network for transmitting electronic messages:

15 a plurality of order input devices connected to the communications network each for generating electronic order messages including bid and/or offer orders and for communication to a trader of price information received from others of said plurality of trader terminals over the network;

20 at least one matching engine connected to the network for matching orders input into the system from the order input devices and for assisting in executing deals where prices are matched;

market distribution means connected to the network for distributing price messages to the trader terminals, the market distribution means being responsive to the price messages and the matching engine;

25 a plurality of order input device interface means, each order input device interface means having order input devices representing at least one trading floor connected thereto for communication of electronic order

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messages to the at least one matching engine and for communication of price messages and deal information messages to the connected trader terminals; wherein

5 the order input device interface means and the matching engine further comprise means for matching and executing a plurality of orders linked together, wherein all of said linked orders are either executed together or rejected.

10 2. An anonymous trading system according to claim 1 wherein the means for executing a plurality of linked orders comprises means at the matching engine for matching each of the orders comprising the plurality of linked orders, and means for rejecting the linked orders if less than all the orders comprising the linked order are matched.

15 3. An anonymous trading system according to claims 1 or 2 wherein the electronic order messages are invisible hit orders.

4. An anonymous trading system according to claim 3 wherein the hit orders are persistent.

20 5. An anonymous trading system according to claim 1, comprising a plurality of matching engines, said plurality of matching engines including a taker matching engine connected to the order input device interface means to which the order input device submitting the
25 linked order is connected, wherein the means for matching each of the orders comprising the plurality of linked orders is located at the taker matching engine.

6. An anonymous trading system according to claim 1, wherein the means for matching and executing a plurality of linked orders comprises means for generating and sending to the matching engine an instruction to match and execute a plurality of linked orders.
7. An anonymous trading system according to claim 6, wherein the means for generating and sending to the matching engine an instruction to match and execute a plurality of linked orders includes means for identifying each of the orders to be matched and means for indicating that the orders are linked.
8. An anonymous trading system according to claim 1, wherein the means for matching and executing a plurality of linked orders comprises, at the order input device interface means to which an order input device submitting a linked order is connected, means for receiving a message from the matching engine indicating that an order is executable and means for completing each of the orders comprising the plurality of linked orders when executable order messages have been received for each of the linked orders.
9. An anonymous trading system according to claim 8, wherein the means for receiving executable order messages and for completing each order comprises means for adjusting the amount of one or more of said plurality of orders.

10. An anonymous trading system according to claim 8, wherein the means for completing each of the orders comprising the plurality of linked orders comprises means for simultaneously completing each of the linked orders.
- 5 11. An anonymous trading system according to claim 1, wherein the order input device interface means comprises means for converting a single order message input from a connected order input device into a plurality of linked orders.
- 10 12. An anonymous trading system according to claim 11, wherein the single order message input from a connected order input device comprises an order for a trade between a first and second currency pair and the order input device interface means converts the order into an order
15 for a trade between the second and a third currency pair and a linked order for a trade between the first and the third currency pairs.
13. An anonymous trading system according to claim 1, comprising at least one broking node, each broking node
20 comprising one of said at least one matching engines and a market distribution means.
14. An anonymous trading system according to claim 13, wherein the broking node further includes the order input interface means.
- 25 15. An anonymous trading system according to claim 13 or 14, comprising a plurality of said broking nodes.

16. An anonymous trading system for trading instruments between traders; comprising:

a plurality of order input devices;

5 A network of brokers, each broker comprising a matching engine for matching bids and offers entered into the system and for assisting in executing deals where orders are matched, and market distribution means for distributing price messages to order input devices;

10 a plurality of trading agents, each trading agent being connected to a broker and providing an interface between a trading floor of said order input devices and the broker to which the trading agent is connected, wherein;

15 at least one of said plurality of trading agents and the broker to which it is connected include means for matching and executing joint execution orders comprising a plurality of orders linked together, wherein all of said linked orders are either executed together or
20 rejected.

17. An anonymous trading system according to claim 15, wherein each of said plurality of brokers and connected trading agents comprise said means for matching and executing joint execution orders.

25 18. An anonymous trading system for trading instruments between traders; comprising:

a plurality of order input devices;

A network of brokers, each broker comprising a matching engine for matching bids and offers entered into

the system and for assisting in executing deals where orders are matched, market distribution means for distributing price messages to order input devices, and an interface between a trading floor of said order input devices and the broker, wherein;

at least one of the brokers comprises means for matching and executing joint execution orders comprising a plurality of orders linked together, wherein all of said linked orders are either executed together or rejected.

19. An anonymous trading system according to claim 18, wherein each of said plurality of brokers comprise said means for matching and executing joint execution orders.

20. An anonymous trading system according to claim 17, wherein said means for matching and executing joint execution orders includes, at each trading agent, means for converting a simple order for a first transaction type input from a order input device connected to the trading agent into a joint execution order for a second and third transaction type.

21. An anonymous trading system according to claim 19, wherein said means for matching and executing joint execution orders includes, at each broker, means for converting a simple order for a first transaction type input from a order input device connected to the broker into a joint execution order for a second and third transaction type.

22. An anonymous trading system according to claim 20 or 21,
wherein said first transaction type is a currency pair
having first and second currencies, said second
transaction type is a second currency pair comprising
5 said first currency and a third currency and the third
transaction type is a third currency pair comprising said
second currency and said third currency.
23. An anonymous trading system according to any of claims 16
to 22, wherein the means for matching joint execution
10 orders comprises, at the broker, means for matching each
order of the compound order and, if less than all of the
orders can be matched, for rejecting the joint execution
order.
24. An anonymous trading system according to any of claims 16
15 to 23, wherein the joint execution orders are invisible
hits.
25. An anonymous trading system according to claim 24,
wherein the joint execution orders are persistent whereby
the broker stores one or more orders of the joint
20 execution order that cannot be matched immediately for a
given time and attempts to match the stored orders with
quotes subsequently entered into the system and passed to
the broker.
26. An anonymous trading system according to claim 16 or 17,
25 wherein the means for matching and executing joint
execution orders comprises means at the trading agent for

sending to the broker a message instructing a joint execution order.

27. An anonymous trading system according to any of claims 16 to 26, wherein the means for matching and executing joint execution orders comprises means for receiving a message indicating that each of said orders comprising said joint execution order is executable and means for completing the joint execution order only when all orders in the joint execution order are executable.
28. An anonymous trading system according to claim 27, wherein an order is executable only after completion of a credit check on the counterparty.
29. An anonymous trading system according to claim 27 or 28, wherein the means for matching and executing joint execution orders comprises means for adjusting the volume of each of the orders to correspond to the volume of the smallest executable order of the joint execution order.
30. An anonymous trading system for trading instruments between traders, comprising:
- a plurality of order input devices;
 - a network of matching engines for matching orders comprising bids and offers and for assisting in executing deals where orders are matched;
 - a plurality of market distribution means for distributing bid and offer information to trader terminals, the market distribution means being responsive

to the matching engine and to bids and offers entered into the system;

a plurality of interfaces between trading floors comprising one or more of said order input devices, and the matching engines; wherein:

at least one of the interfaces and associated matching engines comprise means for matching and executing joint execution orders comprising a plurality of linked orders, and include means for rejecting a joint execution order if less than all the plurality of linked orders are executable.

31. An anonymous trading system according to claim 30, wherein said means for executing joint execution orders comprises means for reducing the volume of each of the orders of the plurality of linked orders to the volume of, or in proportion to the volume of, the smallest executable order.

32. An anonymous trading system according to claim 30 or 31, wherein each of said plurality of matching engines and associated interfaces comprise said means for matching and executing joint execution orders.

33. An anonymous trading system according to claim 32, wherein said means for matching and executing joint execution orders includes, at each of said plurality of interfaces, means for converting a simple order for a first transaction type input from a trader terminal connected to the interface into a joint execution order for a second and third transaction type.

34. An anonymous trading system according to claim 33,
wherein said first transaction type is a currency pair
having first and second currencies, said second
transaction type is a second currency pair comprising
5 said first currency and a third currency and the third
transaction type is a third currency pair comprising said
second currency and said third currency.

35. An anonymous trading system for trading synthesised
currency pairs between traders comprising:

10 a plurality of order input devices;

a network of matching engines, each matching engine
matching bid and offer orders entered into the system and
assisting in the execution of deals where bid and offer
orders have been matched;

15 market distribution means for distributing
information relating to bid and offer orders in the
system to the trader terminals;

a plurality of interfaces between trading floors
each having one or more of the quote input devices and
20 the matching engines;

means for synthesising bid and offer orders for
transactions between a pair of currencies having a first
currency and a second currency from bid and offer orders
entered into the system for transactions between a
25 currency pair comprising the first currency and a third
currency and bid and offer orders entered into the system
for transactions between a currency pair comprising the
second currency and the third currency;

means at the matching engines and the interfaces for matching and executing joint execution orders comprising a plurality of orders linked together wherein all of said linked orders are either executed together or rejected, and wherein;

the interfaces further include means for converting a bid or offer order in said synthetic currency pair into a joint execution order comprising an order in each of said currency pair comprising the first and third currency and said currency pair comprising the second and third currency.

36. An anonymous trading system according to claim 35, wherein said bid or offer order in said synthetic currency pair is an invisible order.

37. An anonymous trading system according to claim 36, wherein said bid or offer order in said synthetic currency pair is a persistent order.

38. An anonymous trading system for trading instruments between traders; comprising:

a plurality of trader terminals;

A network of brokers, each broker comprising a matching engine for matching bid and offer orders entered into the system and for assisting in executing deals where orders are matched, and market distribution means for distributing price messages to trader terminals;

a plurality interfaces between trading floors of said trader terminals and the brokers;

wherein the interfaces each further comprise means for entering compound orders comprising a series of bid or offer orders and a deal limit, wherein the sum of the orders is greater than the deal limit, and the brokers each comprise means for cancelling the orders in the compound order when an amount equal to the deal limit has been executed.

39. An anonymous trading system for trading synthesised currency pairs between traders comprising:

a plurality of order input devices;

at least one matching engine for matching bid and offer orders entered into the system and assisting in the execution of deals where bid and offer orders have been matched;

market distribution means for distributing information relating to bid and offer orders in the system to the trader terminals;

means for synthesising bid and offer orders for transactions between a pair of currencies having a first currency and a second currency from bid and offer orders entered into the system for transactions between a currency pair comprising the first currency and a third currency and bid and offer orders entered into the system for transactions between a currency pair comprising the second currency and the third currency;

means for matching and executing joint execution orders comprising a plurality of orders linked together wherein all of said linked orders are either executed together or rejected; and

means for converting a bid or offer order in said synthetic currency pair into a joint execution order comprising an order in each of said currency pair comprising the first and third currency and said currency pair comprising the second and third currency.

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